## 世界知的所有権機關 国際事務局 特許協力条約に基づいて公開された国際出願



(51) 国際特許分類7 H01L 23/12, 23/15, H05K 3/34

(11) 国際公開番号

WO00/52755

(43) 国際公開日

2000年9月8日(08.09.00)

(21) 国際出願番号

PCT/JP00/00695

A1

(22) 国際出願日

2000年2月9日(09.02.00)

(30) 優先権データ

符願平11/49450

1999年2月26日(26.02.99) JÞ

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(81) 指定国 CA. CN. KR. SG, US. 欧州特許 (AT, BE, CH. CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE)

添付公開書類

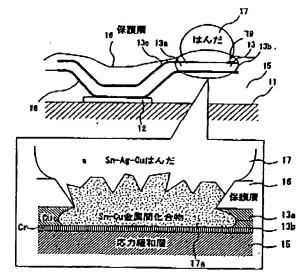
国際開查報告書

WIRING BOARD AND ITS PRODUCTION METHOD, SEMICONDUCTOR DEVICE AND ITS PRODUCTION (54)Title: METHOD, AND ELECTRONIC APPARATUS

(54)発明の名称 配線基板およびその製造方法、半導体装置およびその製造方法並びに電子機器

(57) Abstract

A high-density wiring board having a high connection reliability and produced at low cost. The wiring board is characterized by comprising a board having an electrode and covered with an insulating layer in which a hole is made so as to expose the electrode, a wiring connected to the electrode and formed of a layer adhering to the insulating layer and made of Cr or Ti and a layer adhering to the Cr or Ti layer and made of Cu, a protective film covering the wiring and having therein a hole for soldering, and solder for external connection formed in the hole by diffusion-alloying the Cu layer and reaching the Cr or Ti layer for establishing connection.



16...PROTECTIVE LAYER

17 ... 901.DER

a...Sm-Ag-Cu SOLDER

178 ... SA-CU INTERMETAL LIE COMPOUND

15...STRESS RELAXATION LAYER



□Include

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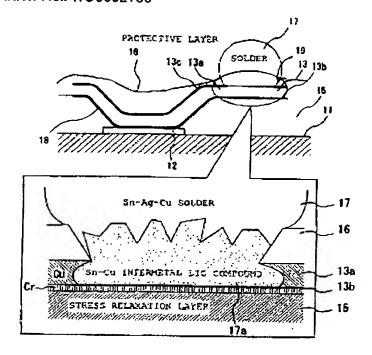
Search scope: US EP WO JP; Full patent spec.

Years: 1990-2001

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Text: Patent/Publication No.: WO0052755

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## WO0052755

WIRING BOARD AND ITS PRODUCTION METHOD, SEMICONDUCTOR DEVICE AND ITS PRODUCTION METHOD, AND ELECTRONIC APPARATUS HITACHI, LTD.

Inventor(s):NARIZUKA, Yasumori ;ITOU, Mitsuko ;YAMAGUCHI, Yoshihide ;TENMEI, Hiroyuki Application No. JP0000695 JP, Filed 20000209, A1 Published 20000908

Abstract: A high-density wiring board having a high connection reliability and produced at low cost. The wiring board is characterized by comprising a board having an electrode and covered with an insulating layer in which a hole is made so as to expose the electrode, a wiring connected to the electrode and formed of a layer adhering to the insulating layer and made of Cr or Ti and a layer adhering to the Cr or Ti layer and made of Cu, a protective film covering the wiring and having therein a hole for soldering, and solder for external connection formed in the hole by diffusion-alloying the Cu layer and reaching the Cr or Ti layer for establishing

. connection.

Int'l Class: H01L02312: H01L02315 H05K00334

Priority: JP 11/49450 19990226

Designated States: CA CN KR SG US AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL

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